



## **CAREER OPPORTUNITY**

### **U.S. DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION (FRA)**

**ANNOUNCEMENT NUMBER: FRA-04-79R**

**POSITION TITLE:** Supervisory Structural Engineer  
GS-810-15  
GS-15: \$100,231 to \$130,305 per annum  
Full Performance Level: GS-15  
Note: This position has special job requirements.  
See pages 4.

**POSITION LOCATION:** Federal Railroad Administration  
Office of the Associate Administrator for Safety,  
Office of Safety Assurance and Compliance,  
Track Division,  
Washington, DC

**AREA OF CONSIDERATION: DOT Wide (DOT status candidates and DOT candidates eligible for special appointing authorities. Candidates eligible for consideration under the Career Transition Assistance Program also may apply.)**

**OPENING DATE: 11-29-04**

**CLOSING DATE: 12-20-04**

**NUMBER AND TYPE: One Full-Time Permanent Position**

**Due to U.S. mail delays, it is recommended that applicants fax, use a professional delivery service (i.e., FedEx, UPS, etc.), email, or personally deliver applications to ensure timely receipt.**

#### **DOT is an Equal Opportunity Employer**

All qualified applicants will be considered regardless of political affiliation, race, color, religion, national origin, sex, sexual orientation, marital status, age, disability, or other non-merit factors. DOT provides reasonable accommodations to applicants with disabilities. If you need a reasonable accommodation for any part of the application and hiring process, please notify us. Decisions on granting reasonable accommodation will be made on a case-by-case basis.

**Why Work For Us?** Transportation impacts every facet of American life, providing people access to work, school, loved ones, and nature's rich bounty. The U.S. Department of Transportation is committed to transportation excellence and strives to create the best possible

integrated air, land, and sea transportation system for America. As a DOT employee, you will become a part of the dedicated workforce who works day-to-day to make measurable improvements in our transportation system, the security of our nation, and the quality of American life.

The Federal Railroad Administration, an Operating Administration under the Department of Transportation, was created to promote and enforce safety throughout the U.S. railroad system, rehabilitate the Northeast Corridor rail passenger services, consolidate Federal support for rail transportation, and support research and development for rail transportation for passengers, railroad employees and the general public.

**Summary Of The Essential Job Functions: As a Supervisory Structural Engineer, you will be required to:**

- Serve as an advisor to the Division Chief, on all aspects of bridges and other track carrying structures and make recommendations for the revision of national policies, programs, rules, regulations, standards, and procedures related to railroad structures safety and bridge worker safety.
- In coordination with staff of the multiple disciplines with FRA, responsible for the planning, development, coordination, implementation, and direction of the Railroad Structures program consistent with the FRA national plan and policies, the Department of Transportation Strategic Plan, FRA technical directives and guidance, and accepted criteria for railway and structural engineering.
- Establish criteria for evaluating the condition of existing railroad structures to determine the adequacy of existing railroad bridge inspection and rating programs.
- Review recommendations from the staff's structural engineer concerning new or advanced structural or materials technology which can be effectively utilized to improve structural design or materials preservation or maintenance.
- Coordinate and direct augmented staff when needed to accomplish special tasks or projects, which involve multiple railroad safety disciplines.
- Work closely with the Division Chief and regional managers to provide any technical guidance and assistance needed for FRA railroad safety inspectors and specialists and state inspectors involved in compliance activities for railroad structures and the protection of bridge workers.
- May lead inspections of and evaluate existing railroad bridges. This includes rating or evaluating structures for suitability for intended service to respond to Department, Congressional, State, local, and public inquiries.
- Direct and coordinate the preparation and finalization of controlled correspondence, waivers, petitions, recommendations for reconsideration, special investigations and studies, regulations, the FRA Compliance Manual, Congressional reports, National Transportation Safety Board or Transportation Security Agency recommendations, GAO/OIG audits and recommendations, research and technical reports, and Departmental reports.
- Assure FRA representation, as appropriate, in interagency, intergovernmental, and intra-departmental matters. Represent the FRA in contacts with the rail community, elected public officials, news media, other government agencies, Indian tribes, union, civic, and private interest groups on various department program functions and policies.

- Direct a staff of one or more Structural Engineers and Railroad Safety Specialists in Washington, DC headquarters and four or more Railroad Safety Specialist who telecommute from regional locations.
- Make recommendations to the Division Chief regarding budget requirements, program plans, workforce staffing allocations, workforce planning, and effective position management. Implements improved work processes and business practices to ensure maximum productivity within employment ceilings and funds. Assign work and establish priorities and deadlines, provide technical guidance, if required, and reviews work products.
- Carry out human resources responsibilities, furthers equal opportunity employment, and ensures all employees and applicants for employment receive fair and equitable treatment in all aspects of human resources management.

## **What Are The Minimum Qualifications For This Position?**

### **Basic Requirements:**

**A:** Degree: professional engineering. To be acceptable, the curriculum must: (1) be in a school of engineering with at least one curriculum accredited by the Accreditation Board for Engineering and Technology (ABET) as a professional engineering curriculum; or (2) include differential and integral calculus and courses (more advanced than first-year physics and chemistry) in five of the following seven areas of engineering science or physics: (a) statics, dynamics; (b) strength of materials (stress-strain relationships); (c) fluid mechanics, hydraulics; (d) thermodynamics; (e) electrical fields and circuits; (f) nature and properties of materials (relating particle and aggregate structure to properties); (g) any other comparable area of fundamental engineering science or physics, such as optics, heat transfer, soil mechanics, or electronics.

**OR**

**B:** Combination of education and experience-college-level education, training, and/or technical experience that furnished: (1) a thorough knowledge of the physical and mathematical sciences underlying professional engineering, and (2) a good understanding, both theoretical and practical, of the engineering sciences and techniques and their applications to one of the branches of engineering. The adequacy of such a background must be demonstrated by one of the following: (1) current registration as a professional engineer by any state, the District of Columbia, Guam, or Puerto Rico; (2) evidence of having successfully passed the Engineer-in-Training examination, or the written test required for professional registration, which is administered by the Boards of Engineering Examiners in various states, the District of Columbia, Guam and Puerto Rico; (3) successful completion of at least 60 semester hours of courses in the physical, mathematical, and engineering sciences and in engineering, or (4) successful completion of a curriculum leading to a bachelor's in engineering technology or in an appropriate professional field.

In addition to meeting the basic qualification requirements listed above, you must have at least one year of specialized experience in or directly related to the essential job functions described above. For Federal employees this experience must have been at the next lower grade level. If you want us to consider experience you obtained outside the Federal Government, it must have been at that same level of complexity. Qualifications and time-in-grade requirements must be met by the closing date of the announcement.

Specialized experience is experience that equipped the applicant with the particular knowledge, skills and abilities to perform successfully the duties of the position to be filled. The specialized experience should clearly demonstrate that the candidate possesses the knowledge, skills, abilities and other characteristics (KSAOCs) required by this position which are listed below.

### **What Are The Required Knowledge, Skills And Abilities For This Job?**

- Knowledge of advanced concepts, principles and practices of railroad bridge and structural engineering.
- Knowledge of steel, timber and concrete fabrication techniques and methods including welding procedures, timber treating and preservation, concrete pre and post-tensioning requirements and materials testing techniques.
- Knowledge of Federal, state, association and institutional laws, regulations, policies, procedures and specifications relating to the design, rating, and maintenance of railroad bridges and track carrying structures.
- Professional knowledge of hydraulics, geotechnical and safety engineering principles and practices applicable to railroad structures.
- Ability to clearly and effectively communicate with individuals and groups and to effectively express ideas and recommendations with a broad range of individuals in order to foster effective relationships with internal and external customers, subject matter experts, Federal authoritative points or contacts, and personnel throughout the Federal government and private industry.
- Ability to effectively express ideas and recommendations in writing.
- Ability to supervise a staff.
- Ability to lead a diverse workforce, including: creating a culture that fosters high standards of ethics; developing strategies to maximize employee potential; developing performance plans and monitoring performance; resolving conflicts; fostering workforce diversity on the staff; and recognizing staff contributions.

### **How Will The Qualified Applicants Be Further Evaluated And Rated To Identify The Best Qualified?**

If you are basically qualified for this job, you will be further evaluated on the quality and extent of your total accomplishments, experience and education related to the knowledge, skills and abilities listed above. We also may consider your performance appraisal, awards, and relevant training. Your ranking will measure the degree to which your background matches the demands of this position.

**What Employee Benefits Do We Provide?** The Federal Government offers excellent benefits, flexible work schedules and family-friendly programs. You will receive paid annual leave and sick leave. This is a permanent position and you will be eligible for retirement, health insurance, life insurance and Long Term Care insurance. A brief summary of the Federal benefits for permanent employees can be found at [www.usajobs.opm.gov/EI61.htm](http://www.usajobs.opm.gov/EI61.htm).

### **Before You Go Any Further, Here Are Some Other Things You Need to Know**

- United States citizenship is required. (Proof of citizenship will be required to be shown upon appointment.)
- If you are a male between the ages of 18 and 26 or were born after December 31, 1959, certification is required at the time you are employed that you have registered with the Selective Service for the draft, unless Selective Service has approved a waiver for you.
- You must meet the qualification and time-in-grade requirements by the closing date of the announcement.
- If you can be appointed under a special appointment authority, please let us know on your application the special appointing authority for which you can be considered. You must submit proof of your eligibility for a special appointment authority.
- The FRA has determined that seniority rights, leaves of absence, and reemployment rights generally constitute an actual or an appearance of a conflict of interest. New employees may be required to divest themselves of such rights immediately upon hire if these rights are determined to constitute an actual or appearance of a conflict of interest. If new employees are permitted to retain such rights, which is generally the case for Railroad Safety positions, the rights must be divested at the end of the one year probationary period. No waivers of this requirement will be granted.
- FRA employees are prohibited from owing railroad stock, except, under certain circumstances, as part of a diversified mutual fund.
- If selected, you will be subject to the Standards of Ethical Conduct applicable to all DOT employees.
- If an FRA employee is selected, travel and transportation expenses will be paid if the selection results in a promotion OR for a geographical reassignment if the FRA selectee occupies a position that has significantly different duties from that of this position vacancy. If a candidate outside FRA is selected, travel and transportation expenses will not be paid.
- If selected, you will be required to serve a one-year probationary period for newly appointed supervisors, unless you previously have completed a supervisory or managerial probationary period. Satisfactory completion of the supervisory probationary period is a prerequisite to continuation in the position.

### **How To Apply For This Position**

- You must submit your current SF-171 (Application for Federal Employment), Resume, or an OF-612 (Optional Application for Federal Employment). You may choose which form to submit provided it contains all required information. Required information is listed in the section below labeled "Here's What Your Application Must Contain." Please be sure to indicate what grade level(s) you are applying for and the duty location.
- For maximum consideration, tell us how you meet the "Knowledge, Skills and Abilities (KSAs)" for this position. The KSAs for this position are found above.
- For Federal applicants, a complete performance appraisal is required. It must be current – meaning it was issued to you within the past year – and it must be official – meaning it

appraises your performance over a normal rating cycle in your present job and has been signed by your supervisor. If you are unable to submit your current performance appraisal, please tell us why. You also must submit a copy of your latest SF-50 "Notification of Personnel Action" that reflects career or career-conditional tenure.

- To be considered for selection priority under the Career Transition Assistance Program (CTAP), you must submit appropriate certification that you are eligible. You also must meet the job's minimum qualifications and rate at least Highly Qualified on the crediting plan for each knowledge, skill and ability requirement that is listed in this announcement.

### **Where To Send Your Application**

- You may **mail or deliver** your application to the Federal Railroad Administration, Office of Human Resources, 1120 Vermont Avenue, NW., 6<sup>th</sup> Floor, Washington, DC 20590.
- If you are faxing your application, please limit the application to **a maximum of 20 pages** and include a cover sheet. Our fax number is (202) 493-6169. We will not accept applications faxed from a Federal Government fax machine.
- ALL applications must be in our office or postmarked by the closing date of the announcement.
- Applications mailed in a Government envelope will not be accepted.

## HERE'S WHAT YOUR APPLICATION MUST CONTAIN

### JOB INFORMATION

- Announcement number and title of the position

### PERSONAL INFORMATION

- Full name
- Mailing address (with Zip Code)
- Social Security Number
- Country of citizenship (Most Federal jobs require United States citizenship)
- Veterans' preference  
(**Proof Required – Attach DD 214**)
- Federal employees & Reinstatement eligibles (**Attach SF-50**)
- Highest Federal civilian grade held

### EDUCATION

- High School name, city, state, and date of diploma or GED
- College/University names, city, and state
- Major(s)
- Type and year of degree(s) received

### WORK EXPERIENCE

(paid and unpaid)

- Job Title
- Duties and accomplishments
- Employer's name and address (indicate if we may contact your current supervisor)
- Supervisor's name and telephone number
- Starting and ending dates (month and year)
- Hours per week
- Salary and/or Grade (GS-or equivalent)

### OTHER QUALIFICATIONS

- Job-related training courses (title and year)
- Job-related skills (e.g., foreign languages, computer software/hardware, etc.)
- Job-related certificates and licenses (current only)
- Job-related honors, awards, and special accomplishments (e.g., memberships in professional or honor societies, leadership activities, public speaking, performance awards and publications) (give dates)

**Privacy Act Requirements:** The forms referenced in this announcement are used to determine applicants' qualifications for the position and are authorized under 5 U.S.C. 3302 and 3361.

### Questions?

Call Renee Clark at (202) 493-6117 or TDD (202) 493-6487 or 6488, or email at [renee.clark@fra.dot.gov](mailto:renee.clark@fra.dot.gov). Please reference the announcement number so we can help you more efficiently.

Para mas informacion en espanol sobre este anuncio de vacante o cualquier otra information sobre empleo en las Federal Railroad Administration (FRA), por favor llame a Francisco Gonzalez 202/493-6076. La FRA es un empleador con igualdad de oportunidad en el empleo, y que por medio de programas de accion afirmativa mantiene un ambiente multicultural. Todos los que soliciten recibiran igual consideracion, sin ninguna excepcion, por raza, color, religion, sexo, origin nacional, politica, impedimento fisico o edad.

**ALTERNATIVE FORMATS:** If you need a copy of this announcement in an alternative format to accommodate a disability, please contact Marcella Mullins at [marcie.mullins@fra.dot.gov](mailto:marcie.mullins@fra.dot.gov), on (202) 493-6114 or at the TDD number (202) 493-6487 or 6488.

**REASONABLE ACCOMMODATION:** If you are requesting reasonable accommodation in connection with applying for this vacancy, please contact Marcella Mullins as listed above.